

**Montana Board of Oil and Gas Conservation
Environmental Assessment**

Operator: Harry Knaup
Well Name/Number: Swears 6-C
Location: SE NW Section 9 T35N R2W
County: Toole MT; **Field (or Wildcat)** Kevin Sunburst

Air Quality

(possible concerns)

Long drilling time: No, 2 to 4 days drilling time.

Unusually deep drilling (high horsepower rig): No, single derrick drilling rig to drill to 1700' TD.

Possible H₂S gas production: Slight.

In/near Class I air quality area: No Class I air quality area.

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:

☒ Air quality permit (AQB review)

☐ Gas plants/pipelines available for sour gas

☐ Special equipment/procedures requirements

☐ Other: _____

Comments: No special concerns – using small single derrick drilling rig to drill to 1700' TD.

Water Quality

(possible concerns)

Salt/oil based mud: No, air, air mist drilling system to be used.

High water table: No high water table anticipated.

Surface drainage leads to live water: Closest drainage is an unnamed ephemeral drainage to a dry lake bed, about 1/8 of a mile to the south and ¼ of a mile to the northwest from this location. About 1/8 of a mile to the south is a stock pond.

Water well contamination: No, no water wells within 1 mile of this location.

Porous/permeable soils: No, silty sandy bentoniteic soils.

Class I stream drainage: No Class I stream drainages.

Mitigation:

☐ Lined reserve pit

☒ Adequate surface casing

☐ Berms/dykes, re-routed drainage

☐ Closed mud system

☐ Off-site disposal of solids/liquids (in approved facility)

☐ Other: _____

Comments: 250' of surface/production casing cemented to surface adequate. No potable water in this area. Also, fresh water air/mist systems to be used.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings anticipated.

High erosion potential: No, small cut, up to 1.7' and small fill, up to 3.3', required.

Loss of soil productivity: No, location will be restored after drilling if nonproductive. If productive unused portion of drill site will be reclaimed.

Unusually large wellsite: No, 100'X100' location size required.

Damage to improvements: Slight, surface use is dry land cultivated field.

Conflict with existing land use/values: Slight

Mitigation

☐ Avoid improvements (topographic tolerance)

☐ Exception location requested

☒ Stockpile topsoil

☐ Stream Crossing Permit (other agency review)

☒ Reclaim unused part of wellsite if productive

☐ Special construction methods to enhance reclamation

☐ Other _____

Comments: No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Buildings nearby, about 1/8 of a mile to the west from this location.

Possibility of H2S: Slight

Size of rig/length of drilling time: Small drilling rig/short 2 to 4 days drilling time.

Mitigation:

☐ Proper BOP equipment

☐ Topographic sound barriers

☐ H2S contingency and/or evacuation plan

☐ Special equipment/procedures requirements

☐ Other: Adequate surface casing operational BOP should mitigate any concerns. Madison is a depleted reservoir.

Comments: No concerns.

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: None identified.

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

Threatened or endangered Species Listed threatened or endangered species in Toole County is the Black Footed Ferret. Proposed species is the Mountain Plover. MT FWP species of concern are Ferruginous Hawk, Chestnut-collared Longspur, McCown's Longspur and Brewer's Sparrow.

Mitigation:

☐ Avoidance (topographic tolerance/exception)

☐ Other agency review (DFWP, federal agencies, DSL)

☐ Screening/fencing of pits, drillsite

☐ Other: _____

Comments: Surface is private cultivated land. No concerns.

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites None identified.

Mitigation

 avoidance (topographic tolerance, location exception)

 X other agency review (SHPO, DSL, federal agencies)

 Other: _____

Comments: Surface is private cultivated land. No concerns.

Social/Economic

(possible concerns)

 Substantial effect on tax base

 Create demand for new governmental services

 Population increase or relocation

Comments: No concerns. Existing oil field, Kevin Sunburst Oil & Gas Field.

Remarks or Special Concerns for this site

Well is a 1700' Madison Formation test. A development well in the Kevin Sunburst Oil & Gas Field.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected, some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki

(title:) Chief Field Inspector

Date: October 4, 2010

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Toole County water wells

(subject discussed)

October 4, 2010

(date)

US Fish and Wildlife, Region 6 website

(Name and Agency)

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES

MONTANA COUNTIES, Toole County

(subject discussed)

October 4, 2010

(date)

Montana Natural Heritage Program Website (FWP)

(Name and Agency)

Heritage State Rank= S1, S2, S3, T35N R2W

(subject discussed)

October 4, 2010

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____